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# Physical Activity

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## NO LEISURE TIME PHYSICAL ACTIVITY

*Definition: Respondents who report no leisure time physical activity or exercise during the past 30 days other than the respondent's regular job.*

### Prevalence of No Leisure Time Physical Activity

- South Dakota 21.7%
- All participants nationwide 24.6%

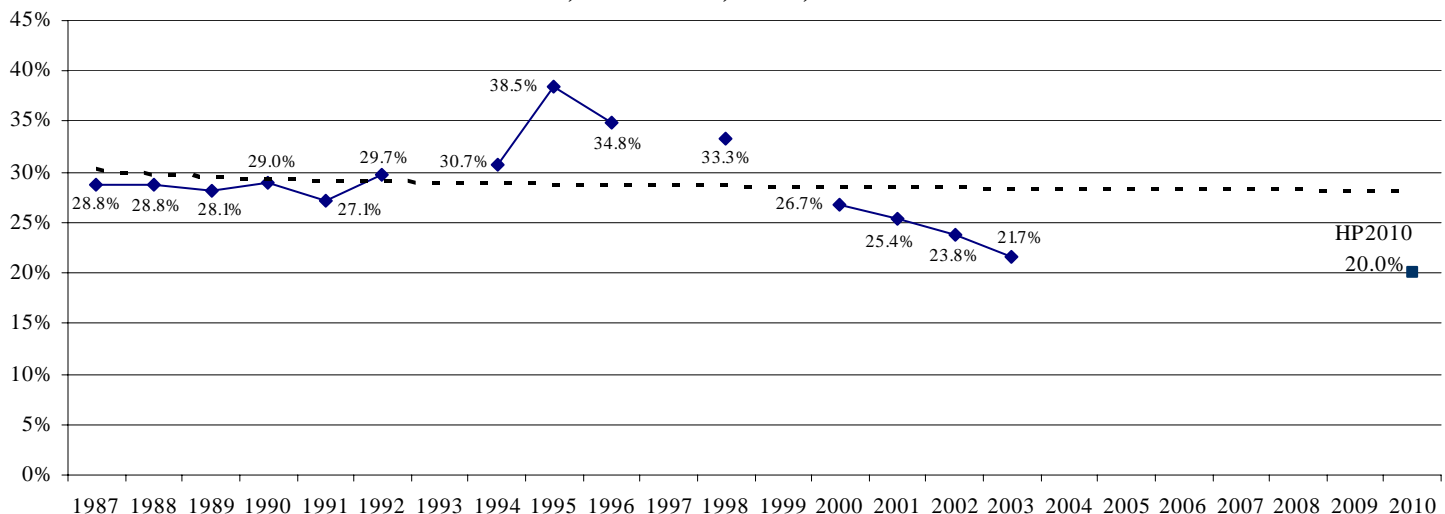
### Healthy People 2010 Objective

*Reduce the proportion of adults who engage in no leisure time physical activity to 20 percent.*

### Trend Analysis

This question was first asked in 1987 and hit its peak in 1995 with 38.5 percent of the respondents stating that they did not engage in a leisure time physical activity. Since 2000, the percent of respondents who do not engage in a leisure time physical activity has been decreasing.

**Figure 6**  
**Percent of Respondents Who Reported No Leisure Time Physical Activity,**  
**1987-1992, 1994-1996, 1998, and 2000-2003**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-1992, 1994-1996, 1998, and 2000-2003

### Demographics

**Gender** There were no appreciable differences in leisure time physical activity between men and women overall.

**Age** No leisure time physical activity increases with age with the most pronounced increase occurring in the 55-64 age group. However, females show a large increase in no activity when they reach 75 or older, whereas males do not show as pronounced a change when they reach the 75 or older age group.

<b>Race</b>	There were no substantial differences between American Indians and whites.
<b>Region</b>	The regional data show the American Indian counties region with a considerably higher percentage with no leisure time physical activity than the southeast and west regions which have the lowest percentage with no leisure time physical activity. These differences hold true for males, but females do not show a notable difference in any of the five regions.
<b>Household Income</b>	The percentage of respondents with no leisure time physical activity generally decreases as household income increases.
<b>Education</b>	There are distinct decreases in respondents with no leisure time physical activity as some post-high school education is achieved, and again for college graduates.
<b>Employment Status</b>	Overall, the percent of respondents with no leisure time physical activity is much higher for the self-employed versus those that are employed for wages. However, this difference does not hold true for females.
<b>Marital Status</b>	Those who are divorced show a much higher percentage of no leisure time physical activity than those who are married. This is the case for females, but males do not show as distinct a difference between the two groups.

**Table 10**  
**Respondents Who Reported No Leisure Time Physical Activity, 2003**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>5,260</b>	<b>21.7</b>	<b>(20.5-23.0)</b>	<b>2,195</b>	<b>21.0</b>	<b>(19.1-22.9)</b>	<b>3,065</b>	<b>22.5</b>	<b>(20.8-24.2)</b>
<b>Age</b>									
18-24	359	11.6	(8.3-16.0)	170	7.5	(4.3-12.9)	189	16.1	(10.7-23.5)
25-34	659	16.1	(13.2-19.4)	272	15.2	(11.1-20.5)	387	16.9	(13.3-21.3)
35-44	984	19.7	(17.0-22.7)	435	21.2	(17.1-26.0)	549	18.2	(14.9-21.9)
45-54	1,025	20.4	(17.8-23.3)	468	21.5	(17.7-25.8)	557	19.4	(16.0-23.3)
55-64	798	26.8	(23.6-30.3)	334	28.1	(23.2-33.6)	464	25.6	(21.5-30.1)
65-74	690	30.0	(26.4-33.9)	272	32.2	(26.4-38.6)	418	28.1	(23.7-33.0)
75+	710	36.3	(32.4-40.3)	234	33.7	(27.3-40.7)	476	37.8	(33.1-42.8)
<b>Race</b>									
White	4,798	21.7	(20.3-23.0)	2,018	21.0	(19.1-23.0)	2,780	22.3	(20.5-24.1)
American Indian	282	26.9	(21.2-33.4)	103	24.8	(16.3-35.7)	179	28.4	(21.4-36.7)
<b>Region</b>									
Southeast	1,291	20.1	(17.7-22.6)	545	19.4	(16.0-23.2)	746	20.8	(17.6-24.3)
Northeast	1,456	23.7	(21.4-26.1)	594	23.5	(20.1-27.4)	862	23.8	(20.8-27.0)
Central	673	23.8	(20.5-27.5)	278	24.9	(19.9-30.7)	395	22.9	(18.7-27.7)
West	1,445	20.0	(17.8-22.3)	621	16.9	(14.4-20.2)	824	23.0	(19.9-26.5)
American Indian Counties	395	28.1	(23.1-33.6)	157	32.3	(24.4-41.3)	238	24.4	(18.6-31.3)
<b>Household Income</b>									
Less than \$15,000	584	32.9	(28.6-37.5)	194	27.6	(21.1-35.1)	390	36.7	(31.3-42.4)
\$15,000-\$19,999	457	34.4	(29.2-40.0)	155	36.5	(27.7-46.3)	302	33.0	(26.8-39.8)
\$20,000-\$24,999	597	25.6	(21.7-30.0)	257	20.7	(15.9-26.4)	340	31.1	(25.2-37.6)
\$25,000-\$34,999	840	20.9	(17.8-24.4)	354	21.5	(17.3-26.6)	486	20.4	(16.1-25.4)
\$35,000-\$49,999	928	19.4	(16.7-22.5)	420	19.7	(15.7-24.3)	508	19.2	(15.7-23.2)
\$50,000-\$74,999	753	15.8	(13.0-19.2)	355	19.2	(14.8-24.4)	398	11.9	(8.7-16.1)
\$75,000+	567	13.6	(10.8-16.8)	316	13.8	(10.3-18.4)	251	13.1	(9.3-18.1)
<b>Education</b>									
Less than High School	554	33.2	(28.8-37.9)	257	33.2	(27.1-40.0)	297	33.1	(27.1-39.7)
High School or G.E.D.	1,764	27.6	(25.3-30.1)	766	26.2	(22.9-29.9)	998	29.1	(25.9-32.5)
Some Post-High School	1,528	19.4	(17.2-21.9)	570	18.7	(15.3-22.6)	958	20.0	(17.1-23.3)
College Graduate	1,395	12.4	(10.7-14.4)	595	11.4	(9.0-14.4)	800	13.3	(11.0-16.1)

Table 10 (continued)									
Respondents Who Reported No Leisure Time Physical Activity, 2003									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b><u>Employment Status</u></b>									
Employed for Wages	2,761	17.4	(15.8-19.1)	1,152	16.8	(14.6-19.4)	1,609	17.9	(15.8-20.2)
Self-employed	657	26.8	(23.2-30.8)	444	30.4	(25.9-35.4)	213	17.4	(12.5-23.8)
Unemployed	113	21.7	(14.2-31.6)	*	*	*	*	*	*
Homemaker	253	24.1	(18.7-30.4)	*	*	*	*	*	*
Retired	1,249	30.6	(27.8-33.5)	453	26.7	(22.5-31.4)	796	33.5	(30.0-37.3)
Unable to Work	123	49.7	(39.4-60.1)	*	*	*	*	*	*
<b><u>Marital Status</u></b>									
Married/Unmarried Couple	3,123	20.6	(19.1-22.2)	1,394	21.6	(19.4-24.0)	1,729	19.6	(17.6-21.8)
Divorced/Separated	695	30.5	(26.7-34.6)	275	27.1	(21.7-33.2)	420	33.0	(27.9-38.6)
Widowed	721	37.0	(33.2-41.0)	120	42.6	(32.9-53.0)	601	35.9	(31.8-40.2)
Never Married	716	14.8	(11.8-18.4)	405	14.3	(10.8-18.8)	311	15.6	(10.8-22.0)

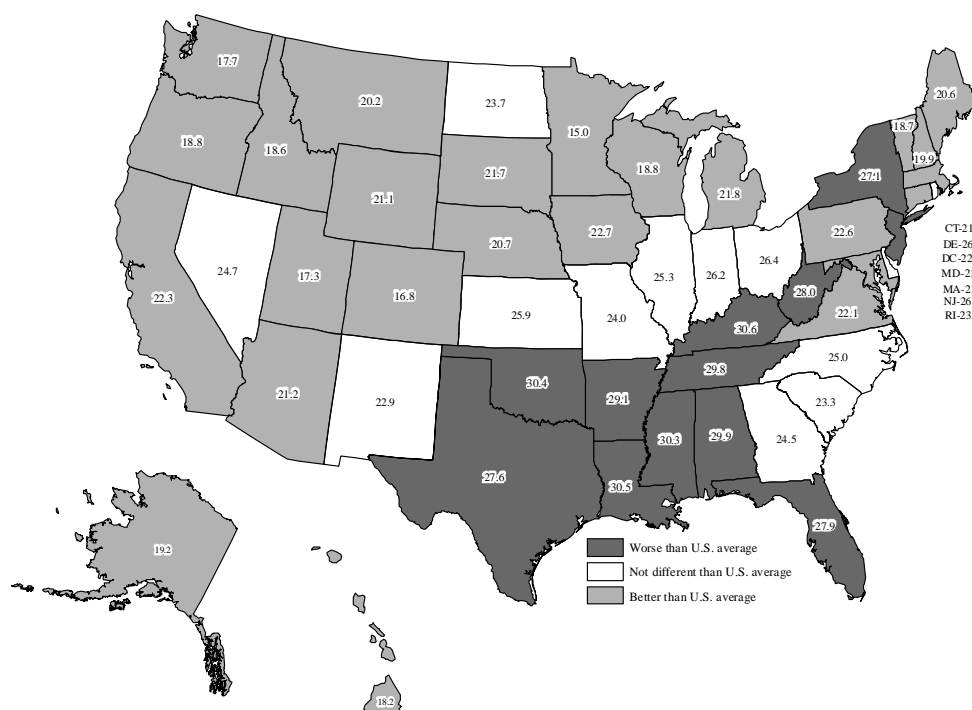
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: \*Results based on sample sizes less than 100 have been suppressed.

## National Statistics

The national percent for respondents who reported they have no leisure time physical activity was 24.6 percent. South Dakota was significantly better than the United States. Minnesota had the lowest percent of respondents who reported having no leisure time physical activity with 15 percent, while Kentucky had the highest percent of respondents who reported having no leisure time physical activity with 30.6 percent.

**Figure 7**  
Nationally, Respondents Who Reported No Leisure Time Physical Activity, 2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

## **Further Analysis**

Following are data illustrating the percent of those who do not engage in leisure time physical activity for various health behaviors and conditions. For example, 38.7 percent of respondents who stated they have fair or poor health have no leisure time physical activity, while 19.2 percent of respondents who stated they have excellent, very good, or good health status have no leisure time physical activity.

<b>Table 11</b>			
<b>No Leisure Time Physical Activity for Selected Health Behaviors and Conditions, 2003</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Leisure Time Physical Activity</b>	<b>95% CI</b>
Fair or Poor Health Status	798	38.7	34.9-42.7
Excellent, Very Good, or Good Health Status	4,452	19.2	17.9-20.5
Obese	1,221	30.8	27.9-33.8
Overweight	3,132	23.6	22.0-25.3
Not Overweight	1,915	18.1	16.1-20.3
No Moderate Physical Activity	2,845	32.0	30.1-34.1
Moderate Physical Activity	2,252	9.6	8.2-11.1
No Vigorous Physical Activity	4,200	26.4	24.9-28.0
Vigorous Physical Activity	977	4.8	3.3-6.9
Not Doing Anything to Control Weight	1,427	27.7	25.2-30.5
Trying to Lose or Maintain Weight	3,824	19.3	17.9-20.8
Less Than Five Servings of Fruits and Vegetables	4,195	22.8	21.4-24.3
At Least Five Servings of Fruits and Vegetables	1,065	17.2	14.8-19.9
Current Smoker	1,141	27.8	24.9-31.0
Former Smoker	1,449	23.3	21.0-25.8
Never Smoked	2,663	18.3	16.7-20.1
Smokeless Tobacco Use	290	21.4	16.6-27.2
No Smokeless Tobacco Use	4,883	21.7	20.4-23.1
Drank Alcohol in Past 30 Days	3,018	18.6	17.1-20.3
No Alcohol in Past 30 Days	2,228	26.4	24.4-28.6
Binge Drinker	796	17.9	15.0-21.1
Not a Binge Drinker	4,435	22.6	21.2-24.0
Heavy Drinker	197	22.1	16.3-29.1
Not a Heavy Drinker	5,032	21.7	20.4-23.0
Hypertension	1,562	28.2	25.7-30.8
No Hypertension	3,691	19.5	18.1-21.0
High Blood Cholesterol	1,396	24.6	22.2-27.2
No High Blood Cholesterol	2,709	20.3	18.7-22.1
No Mammogram within Past Two Years (40+)	495	32.8	28.3-37.7
Mammogram within Past Two Years (40+)	1,694	23.6	21.4-25.9
Insufficient Cervical Cancer Screening	319	26.6	20.8-33.3
Sufficient Cervical Cancer Screening	1,912	19.9	17.9-22.1
No Health Insurance (18-64)	367	23.4	18.8-28.8
Health Insurance (18-64)	3,377	18.3	16.8-19.9
Employer Based Health Insurance Coverage (18-64)	2,369	16.8	15.1-18.6
Private Plan (18-64)	509	21.5	17.5-26.2
Medicaid or Medical Assistance (18-64)	118	19.9	13.6-28.2
The Military, CHAMPUS, TriCare, or the VA (18-64)	131	22.0	15.2-30.7
Indian Health Service (18-64)	145	22.9	15.9-31.9
No Flu Shot (65+)	326	34.6	29.2-40.5
Flu Shot (65+)	1,073	33.0	29.9-36.3
No Pneumonia Shot (65+)	501	34.5	30.0-39.2
Pneumonia Shot (65+)	874	32.5	29.1-36.1

<b>Table 11 (continued)</b> <b>No Leisure Time Physical Activity for Selected Health Behaviors and Conditions, 2003</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Leisure Time Physical Activity</b>	<b>95% CI</b>
Diabetes	453	31.0	26.4-36.0
No Diabetes	4,805	21.0	19.7-22.4
Current Asthma	370	22.8	18.3-28.1
Former Asthma	143	15.2	9.8-22.8
Never Had Asthma	4,731	21.7	20.4-23.1
Arthritis	1,779	28.5	26.2-30.9
No Arthritis	3,442	19.0	17.5-20.5
Arthritis - Activities Limited	836	34.3	30.7-38.0
No Arthritis - Activities Limited	4,376	19.8	18.4-21.2
Disability - Activities Limited	1,125	31.5	28.5-34.6
No Disability - Activities Limited	4,098	19.5	18.1-20.9
Disability with Special Equipment Needed	371	45.1	39.2-51.1
No Disability with Special Equipment Needed	4,856	20.3	19.0-21.6
Injured in a Fall (45+)	177	34.5	27.2-42.7
Not Injured in a Fall (45+)	3,059	26.8	25.1-28.6
Sunburn in Past 12 Months	2,003	16.1	14.3-18.1
No Sunburn in Past 12 Months	3,238	26.2	24.5-27.9
Military Veteran	861	23.9	20.9-27.1
Not a Military Veteran	4,353	21.3	19.9-22.7

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

## **NO MODERATE PHYSICAL ACTIVITY**

*Definition: Respondents who report doing less than 30 minutes per day of moderate physical activity, or less than five days per week of moderate physical activity.*

### **Prevalence of No Moderate Physical Activity**

- South Dakota 53.5%
- All participants nationwide 54.1%

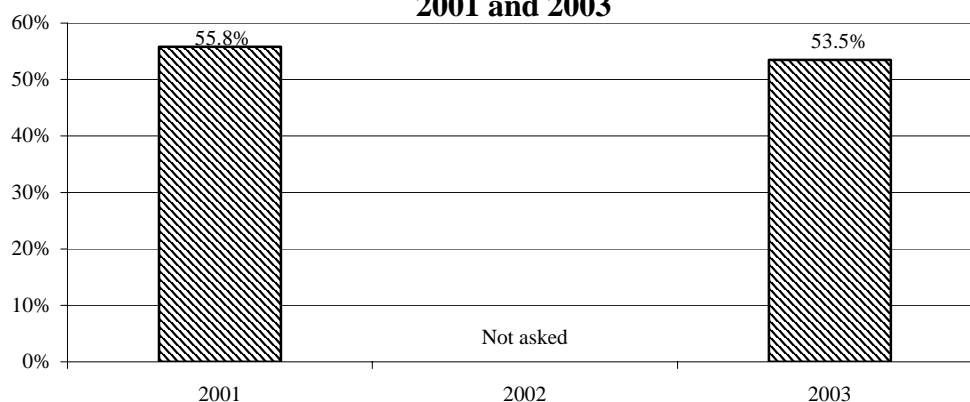
### **Healthy People 2010 Objective**

*Decrease the proportion of adults who do not engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to 50 percent.*

### **Trend Analysis**

This question has only been asked two years, 2001 and 2003. There was a decrease in the percent of respondents who reported no moderate physical activity from 2001 to 2003. South Dakota has yet to meet the *Healthy People 2010 Objective* of 50 percent.

**Figure 8**  
**Percent of Respondents Who Reported No Moderate Physical Activity,**  
**2001 and 2003**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001 and 2003

### **Demographics**

**Gender** There were no substantial differences in respondents who reported no moderate physical activity between men and women overall.

**Age** The percentage of respondents who reported no moderate physical activity increases with age with the most pronounced increase occurring in the 75 and older age group. However, males show a large increase in no activity when they reach the 25-34 age group.

**Race** There were no appreciable differences in the percent of American Indians and whites who report no moderate physical activity.

<b>Region</b>	There were no large differences in the percent of respondents who report no moderate physical activity among the five regions.
<b>Household Income</b>	The percentage of respondents who report no moderate physical activity generally decreases as household income increases.
<b>Education</b>	The percentage of respondents who report no moderate physical activity decreases as education increases.
<b>Employment Status</b>	Overall, the percentage of those who reported no moderate physical activity was much higher for the self-employed than for those employed for wages. However, this difference does not hold true for females.
<b>Marital Status</b>	A much higher percentage of respondents who were married reported no moderate physical activity than those who have never been married. While this difference is the case for males, females do not show a large difference between those two groups.

**Table 12**  
**Respondents Who Reported No Moderate Physical Activity, 2003**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>5,099</b>	<b>53.5</b>	<b>(51.8-55.1)</b>	<b>2,130</b>	<b>52.9</b>	<b>(50.3-55.4)</b>	<b>2,969</b>	<b>54.0</b>	<b>(51.9-56.1)</b>
<b>Age</b>									
18-24	353	40.0	(34.1-46.1)	166	32.3	(24.4-41.4)	187	48.3	(40.1-56.5)
25-34	643	50.1	(45.7-54.4)	270	51.2	(44.5-57.8)	373	48.9	(43.4-54.4)
35-44	964	50.2	(46.7-53.7)	424	52.1	(46.8-57.4)	540	48.2	(43.6-52.9)
45-54	993	54.8	(51.3-58.3)	448	58.0	(52.8-63.0)	545	51.6	(46.9-56.3)
55-64	778	55.6	(51.7-59.5)	327	59.2	(53.2-64.8)	451	52.2	(47.1-57.2)
65-74	664	60.2	(55.9-64.3)	258	59.4	(52.6-65.9)	406	60.8	(55.4-65.9)
75+	672	72.3	(68.5-75.9)	228	69.8	(63.0-75.9)	444	73.9	(69.2-78.1)
<b>Race</b>									
White	4,661	53.7	(52.0-55.4)	1,961	53.5	(50.9-56.1)	2,700	53.9	(51.7-56.1)
American Indian	273	51.1	(43.6-58.5)	100	43.6	(32.0-55.9)	173	56.8	(47.4-65.8)
<b>Region</b>									
Southeast	1,248	52.3	(49.1-55.6)	525	51.5	(46.5-56.4)	723	53.2	(49.0-57.3)
Northeast	1,426	55.7	(52.8-58.7)	584	57.1	(52.5-61.6)	842	54.5	(50.7-58.3)
Central	650	55.1	(50.6-59.4)	268	57.6	(50.7-64.2)	382	52.8	(47.0-58.5)
West	1,395	52.2	(49.1-55.2)	602	49.5	(44.9-54.1)	793	54.8	(50.8-58.8)
American Indian Counties	380	52.3	(46.2-58.3)	151	46.8	(37.4-56.4)	229	57.1	(49.2-64.6)
<b>Household Income</b>									
Less than \$15,000	567	60.0	(54.4-65.3)	187	55.2	(45.7-64.4)	380	63.3	(56.9-69.3)
\$15,000-\$19,999	443	59.4	(53.3-65.3)	149	51.9	(41.8-61.9)	294	64.6	(57.3-71.2)
\$20,000-\$24,999	585	55.5	(50.4-60.4)	253	54.3	(46.8-61.6)	332	56.8	(50.1-63.2)
\$25,000-\$34,999	810	58.1	(53.8-62.2)	345	64.0	(57.5-70.0)	465	52.7	(47.2-58.1)
\$35,000-\$49,999	909	53.0	(49.3-56.7)	412	54.2	(48.7-59.6)	497	51.8	(46.8-56.7)
\$50,000-\$74,999	731	49.5	(45.4-53.6)	341	50.1	(44.0-56.1)	390	48.8	(43.3-54.4)
\$75,000+	559	41.9	(37.4-46.5)	309	44.4	(38.3-50.7)	250	37.9	(31.5-44.8)
<b>Education</b>									
Less than High School	529	62.3	(56.7-67.5)	248	58.1	(50.2-65.6)	281	67.2	(59.7-74.0)
High School or G.E.D.	1,712	57.1	(54.2-59.9)	743	56.8	(52.5-61.0)	969	57.4	(53.6-61.1)
Some Post-High School	1,485	52.4	(49.2-55.5)	554	49.8	(44.6-55.0)	931	54.4	(50.6-58.2)
College Graduate	1,361	46.7	(43.6-49.7)	580	49.2	(44.5-53.9)	781	44.2	(40.3-48.2)
<b>Employment Status</b>									
Employed for Wages	2,703	50.3	(48.1-52.6)	1,130	50.0	(46.6-53.4)	1,573	50.7	(47.8-53.6)
Self-employed	631	57.2	(52.7-61.6)	423	62.9	(57.4-68.0)	208	42.9	(35.6-50.5)
Unemployed	108	50.7	(38.8-62.5)	*	*	*	*	*	*
Homemaker	246	46.8	(39.9-53.8)	*	*	*	*	*	*
Retired	1,195	64.0	(60.9-67.0)	440	59.4	(54.3-64.3)	755	67.6	(63.8-71.1)
Unable to Work	118	69.5	(57.6-79.3)	*	*	*	*	*	*

Table 12 (continued)									
Respondents Who Reported No Moderate Physical Activity, 2003									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<u>Marital Status</u>									
Married/Unmarried Couple	3,040	53.6	(51.6-55.5)	1,354	56.2	(53.2-59.1)	1,686	50.9	(48.3-53.6)
Divorced/Separated	675	55.6	(51.3-59.8)	266	51.6	(44.8-58.3)	409	58.5	(52.9-63.9)
Widowed	685	71.4	(67.6-74.9)	115	71.0	(61.3-79.1)	570	71.5	(67.3-75.3)
Never Married	697	44.3	(39.3-49.3)	394	41.2	(34.8-47.9)	303	49.2	(41.8-56.7)

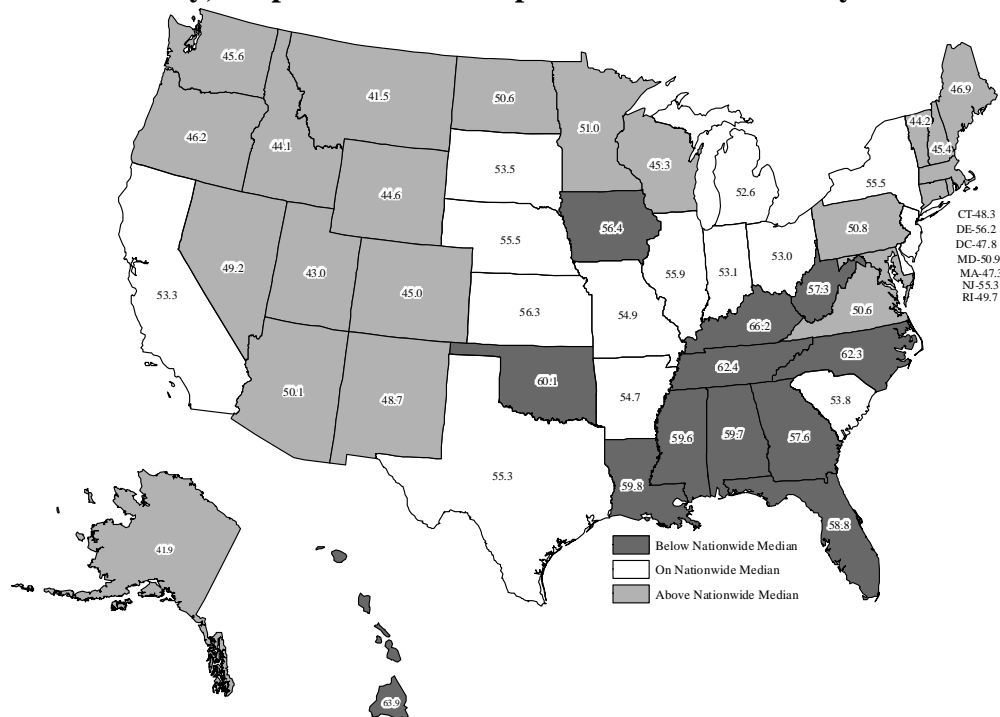
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: \*Results based on sample sizes less than 100 have been suppressed.

## **National Statistics**

The national percent for respondents who reported they have no moderate physical activity was 54.1 percent. South Dakota was not significantly different from the United States. Montana had the lowest percent of respondents who reported having no moderate physical activity with 41.5 percent, while Kentucky had the highest percent of respondents who reported having no moderate physical activity with 66.2 percent.

**Figure 9**  
**Nationally, Respondents Who Reported No Moderate Physical Activity, 2003**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

## **Further Analysis**

Following are data illustrating the percent of those who do not engage in moderate physical activity for various health behaviors and conditions. For example, 70 percent of respondents who stated they have fair or poor health have no moderate physical activity, while 51 percent of respondents who stated they have excellent, very good, or good health status have no moderate physical activity.



**Table 13**  
**No Moderate Physical Activity for Selected Health Behaviors and Conditions, 2003**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Moderate Physical Activity</b>	<b>95% CI</b>
Fair or Poor Health Status	766	70.0	65.8-73.8
Excellent, Very Good, or Good Health Status	4,325	51.0	49.2-52.8
Obese	1,193	59.5	56.2-62.8
Overweight	3,048	55.4	53.2-57.4
Not Overweight	1,856	50.2	47.4-53.0
No Leisure Time Physical Activity	1,230	79.4	76.3-82.1
Leisure Time Physical Activity	3,867	46.3	44.4-48.2
Not Doing Anything to Control Weight	1,365	55.9	52.6-59.1
Trying to Lose or Maintain Weight	3,725	52.5	50.6-54.5
Less Than Five Servings of Fruits and Vegetables	4,058	56.0	54.1-57.8
At Least Five Servings of Fruits and Vegetables	1,041	42.9	39.4-46.4
Current Smoker	1,106	53.8	50.1-57.4
Former Smoker	1,399	55.0	52.0-57.9
Never Smoked	2,587	52.7	50.3-55.0
Smokeless Tobacco Use	282	49.4	42.5-56.4
No Smokeless Tobacco Use	4,772	53.7	52.0-55.4
Drank Alcohol in Past 30 Days	2,934	51.3	49.2-53.5
No Alcohol in Past 30 Days	2,154	56.6	54.0-59.2
Binge Drinker	777	49.7	45.5-54.0
Not a Binge Drinker	4,298	54.3	52.5-56.1
Heavy Drinker	186	49.5	40.7-58.3
Not a Heavy Drinker	4,888	53.6	51.9-55.3
Hypertension	1,508	60.4	57.5-63.2
No Hypertension	3,585	51.1	49.1-53.1
High Blood Cholesterol	1,355	58.9	55.9-61.9
No High Blood Cholesterol	2,630	53.1	50.9-55.3
No Mammogram within Past Two Years (40+)	478	63.9	58.9-68.6
Mammogram within Past Two Years (40+)	1,659	55.9	53.2-58.5
Insufficient Cervical Cancer Screening	312	64.9	57.7-71.4
Sufficient Cervical Cancer Screening	1,870	51.0	48.4-53.7
No Health Insurance (18-64)	360	49.5	43.1-55.8
Health Insurance (18-64)	3,312	50.3	48.3-52.3
Employer Based Health Insurance Coverage (18-64)	2,329	49.3	46.9-51.8
Private Plan (18-64)	499	52.2	47.1-57.3
Medicaid or Medical Assistance (18-64)	115	47.2	35.9-58.8
The Military, CHAMPUS, TriCare, or the VA (18-64)	127	63.4	53.5-72.4
Indian Health Service (18-64)	140	48.5	38.0-59.1
No Flu Shot (65+)	306	66.4	60.1-72.2
Flu Shot (65+)	1,029	66.8	63.6-69.9
No Pneumonia Shot (65+)	485	64.6	59.8-69.2
Pneumonia Shot (65+)	829	67.2	63.5-70.7
Diabetes	442	61.8	56.5-66.9
No Diabetes	4,655	52.8	51.1-54.6
Current Asthma	359	55.6	48.6-62.3
Former Asthma	140	58.3	48.2-67.7
Never Had Asthma	4,586	53.1	51.4-54.8
Arthritis	1,719	61.9	59.2-64.5
No Arthritis	3,365	50.1	48.0-52.1
Arthritis - Activities Limited	810	64.0	60.0-67.8
No Arthritis - Activities Limited	4,273	51.8	50.0-53.6
Disability - Activities Limited	1,100	61.5	58.0-64.9
No Disability - Activities Limited	3,994	51.6	49.7-53.5

<b>Table 13 (continued)</b> <b>No Moderate Physical Activity for Selected Health Behaviors and Conditions, 2003</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Moderate Physical Activity</b>	<b>95% CI</b>
Disability with Special Equipment Needed	359	75.4	69.1-80.7
No Disability with Special Equipment Needed	4,738	52.2	50.4-53.9
Injured in a Fall (45+)	169	67.3	58.9-74.7
Not Injured in a Fall (45+)	2,967	59.4	57.4-61.4
Sunburn in Past 12 Months	1,958	47.4	44.7-50.1
No Sunburn in Past 12 Months	3,124	58.3	56.2-60.3
Military Veteran	838	55.0	51.1-58.8
Not a Military Veteran	4,256	53.1	51.3-55.0

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

## **NO VIGOROUS PHYSICAL ACTIVITY**

*Definition: Respondents who report doing less than 20 minutes per day of vigorous physical activity, or less than three days per week of vigorous physical activity.*

### **Prevalence of No Vigorous Physical Activity**

- South Dakota 78.0%
- All participants nationwide 74.4%

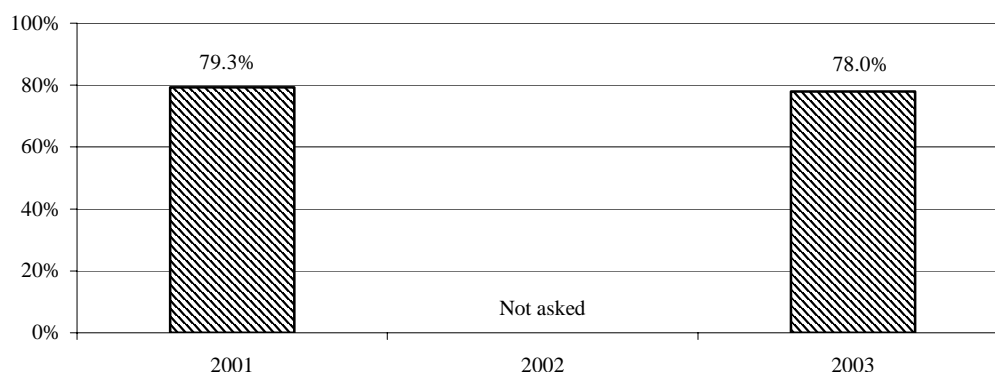
### **Healthy People 2010 Objective**

*Decrease the proportion of adults who do not engage in vigorous physical activity that promotes the development and maintenance of cardio respiratory fitness 3 or more days per week for 20 or more minutes per occasion to 70 percent.*

### **Trend Analysis**

This question has only been asked two years, 2001 and 2003. There was a slight decrease in the percent of respondents who reported no vigorous physical activity from 2001 to 2003. South Dakota has yet to meet the *Healthy People 2010 Objective* of 70 percent.

**Figure 10**  
**Percent of Respondents Who Reported No Vigorous Physical Activity,**  
**2001 and 2003**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001 and 2003

### **Demographics**

**Gender** Female respondents show a considerably higher percentage with no vigorous physical activity than males. This gender difference is most evident in 18-24 year olds, the west region, high school education or less, and with those employed for wages.

**Age** Respondents who report no vigorous physical activity increases with age with the most pronounced increases occurring in the 25-34, 45-54, and 75 and older age group. However, the largest increase for male respondents reporting no vigorous activity occurs when they reach the 25-34 age group, while it occurs for females when they reach the 75 and older age group.

<b>Race</b>	There were no substantial differences between American Indians and white respondents who report no vigorous physical activity.
<b>Region</b>	The northeast and central regions each show a considerably higher percentage of respondents reporting no vigorous physical activity than those in the west region which shows the lowest percentage of those with no activity.
<b>Household Income</b>	Respondents who report no vigorous physical activity generally decreases as household income increases.
<b>Education</b>	Respondents who report no vigorous physical activity decreases as education increases with the most appreciable change occurring when high school education is achieved.
<b>Employment Status</b>	Self-employed males show a considerable increase in the percentage of respondents who report no vigorous physical activity over males who are employed for wages. This, however, does not show up overall because females do not show as large of a difference between the two types of employment status.
<b>Marital Status</b>	Those who are married or divorced report a much higher percentage of no vigorous physical activity than those who have never been married. While this difference is the case for males, females do not show a large difference among those groups.

**Table 14**  
**Respondents Who Reported No Vigorous Physical Activity, 2003**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>5,179</b>	<b>78.0</b>	<b>(76.5-79.4)</b>	<b>2,155</b>	<b>74.5</b>	<b>(72.1-76.8)</b>	<b>3,024</b>	<b>81.4</b>	<b>(79.6-83.0)</b>
<b>Age</b>									
18-24	355	60.0	(53.9-65.7)	166	50.3	(41.4-59.1)	189	70.4	(62.7-77.1)
25-34	651	72.2	(68.1-75.9)	270	71.4	(65.0-77.1)	381	72.9	(67.8-77.5)
35-44	969	74.3	(71.0-77.3)	428	71.8	(66.8-76.3)	541	76.8	(72.5-80.5)
45-54	1,005	80.5	(77.7-83.1)	453	78.8	(74.3-82.6)	552	82.4	(78.5-85.6)
55-64	792	84.6	(81.6-87.2)	332	82.7	(77.8-86.7)	460	86.5	(82.7-89.6)
65-74	679	89.6	(86.8-91.9)	265	88.9	(84.2-92.4)	414	90.2	(86.4-93.0)
75+	695	96.2	(94.2-97.5)	232	95.2	(91.0-97.5)	463	96.8	(94.5-98.1)
<b>Race</b>									
White	4,737	77.9	(76.4-79.4)	1,985	74.8	(72.3-77.2)	2,752	81.0	(79.1-82.7)
American Indian	275	82.9	(76.8-87.6)	101	71.3	(59.8-80.6)	174	91.7	(85.6-95.4)
<b>Region</b>									
Southeast	1,275	77.0	(74.0-79.7)	536	73.6	(68.9-77.9)	739	80.3	(76.8-83.4)
Northeast	1,443	81.7	(79.1-84.0)	589	79.1	(74.8-82.9)	854	84.0	(80.9-86.6)
Central	662	81.3	(77.5-84.5)	273	80.2	(74.2-85.0)	389	82.3	(77.3-86.3)
West	1,415	74.0	(71.0-76.7)	602	69.0	(64.3-73.3)	813	78.9	(75.1-82.2)
American Indian Counties	384	78.0	(72.3-82.8)	155	70.6	(61.1-78.6)	229	84.7	(77.9-89.7)
<b>Household Income</b>									
Less than \$15,000	574	84.0	(78.4-88.3)	189	77.0	(66.6-84.8)	385	88.8	(82.6-93.0)
\$15,000-\$19,999	452	80.5	(74.1-85.6)	152	67.5	(56.0-77.2)	300	89.3	(82.6-93.6)
\$20,000-\$24,999	587	80.4	(75.7-84.4)	252	76.2	(68.7-82.4)	335	84.9	(79.2-89.3)
\$25,000-\$34,999	833	81.9	(78.5-84.8)	348	84.3	(78.9-88.4)	485	79.8	(75.2-83.6)
\$35,000-\$49,999	918	75.5	(72.1-78.7)	415	72.7	(67.4-77.4)	503	78.6	(74.1-82.5)
\$50,000-\$74,999	746	74.7	(70.9-78.1)	351	75.1	(69.6-79.8)	395	74.2	(69.0-78.9)
\$75,000+	562	67.7	(63.0-72.0)	310	65.5	(59.1-71.4)	252	71.0	(64.5-76.8)
<b>Education</b>									
Less than High School	545	90.5	(86.6-93.3)	253	85.7	(79.2-90.4)	292	95.9	(91.8-98.1)
High School or G.E.D.	1,742	81.0	(78.4-83.4)	753	76.2	(72.0-80.0)	989	85.9	(82.9-88.5)
Some Post-High School	1,507	76.3	(73.5-79.0)	560	73.4	(68.4-77.8)	947	78.7	(75.3-81.8)
College Graduate	1,373	71.3	(68.4-74.0)	584	68.9	(64.3-73.2)	789	73.6	(69.9-77.0)

Table 14 (continued)									
Respondents Who Reported No Vigorous Physical Activity, 2003									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Employment Status</b>									
Employed for Wages	2,724	73.7	(71.6-75.7)	1,133	70.2	(66.9-73.4)	1,591	77.2	(74.6-79.5)
Self-employed	649	78.9	(74.9-82.3)	437	80.1	(75.3-84.2)	212	75.6	(68.3-81.6)
Unemployed	109	77.7	(65.9-86.3)	*	*	*	*	*	*
Homemaker	251	82.1	(76.2-86.7)	*	*	*	*	*	*
Retired	1,228	92.3	(90.5-93.8)	448	90.6	(87.2-93.2)	780	93.7	(91.5-95.3)
Unable to Work	119	90.9	(78.2-96.6)	*	*	*	*	*	*
<b>Marital Status</b>									
Married/Unmarried Couple	3,083	79.0	(77.3-80.6)	1,372	77.7	(75.1-80.1)	1,711	80.3	(78.1-82.4)
Divorced/Separated	683	79.1	(75.4-82.4)	267	75.2	(69.0-80.5)	416	81.9	(77.2-85.8)
Widowed	706	94.1	(91.7-95.9)	118	94.1	(88.2-97.1)	588	94.1	(91.3-96.1)
Never Married	705	66.7	(61.7-71.3)	397	62.2	(55.4-68.5)	308	73.8	(66.7-79.8)

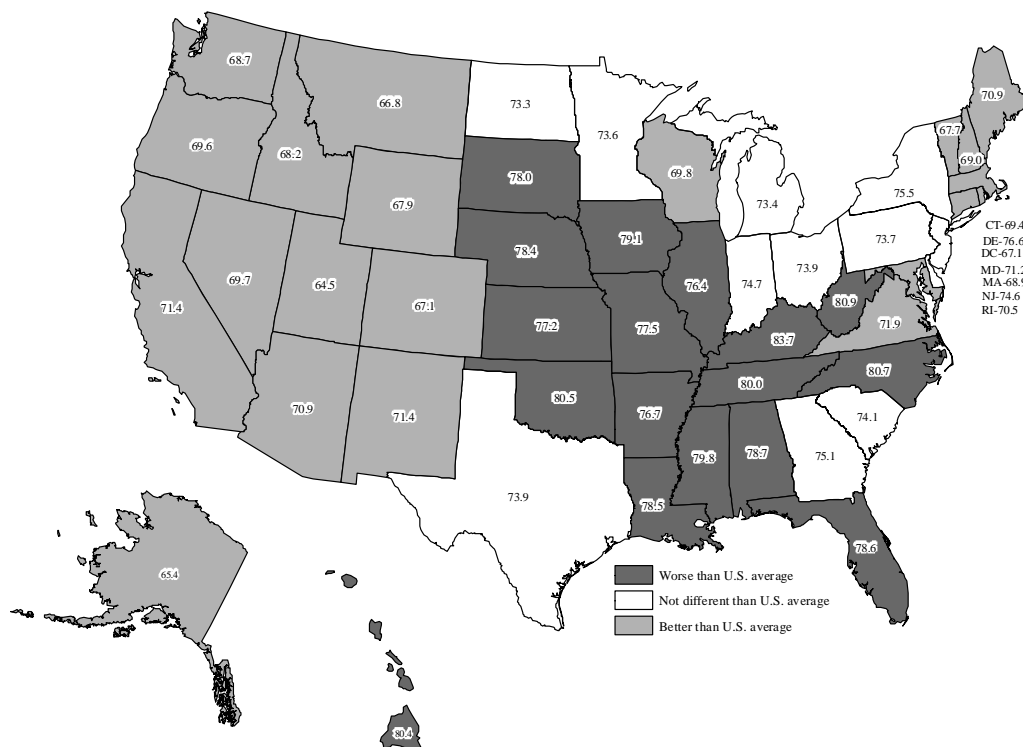
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: \*Results based on sample sizes less than 100 have been suppressed.

## National Statistics

The national percent for respondents who reported having no vigorous physical activity was 74.4 percent. South Dakota was significantly worse than the United States. Utah had the lowest percent of respondents who reported having no vigorous physical activity with 64.5 percent, while Kentucky had the highest percent of respondents who reported having no vigorous physical activity with 83.7 percent.

**Figure 11**  
Nationally, Respondents Who Reported No Vigorous Physical Activity, 2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

## Further Analysis

Following are data illustrating the percent of those who do not engage in vigorous physical activity for various health behaviors and conditions. For example, 94 percent of respondents who stated they have fair or poor health do not participate in vigorous physical activity, while 75.6 percent of respondents who stated they have excellent, very good, or good health status do not participate in vigorous physical activity.

<b>Table 15</b> <b>No Vigorous Physical Activity for Selected Health Behaviors and Conditions, 2003</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Vigorous Physical Activity</b>	<b>95% CI</b>
Fair or Poor Health Status	780	94.0	91.3-95.9
Excellent, Very Good, or Good Health Status	4,390	75.6	74.0-77.2
Obese	1,209	81.5	78.6-84.2
Overweight	3,093	79.2	77.4-80.9
Not Overweight	1,889	75.6	72.9-78.0
No Leisure Time Physical Activity	1,254	95.2	93.1-96.7
Leisure Time Physical Activity	3,923	73.3	71.5-75.0
Not Doing Anything to Control Weight	1,398	81.7	78.8-84.2
Trying to Lose or Maintain Weight	3,773	76.5	74.8-78.2
Less Than Five Servings of Fruits and Vegetables	4,127	79.6	78.0-81.1
At Least Five Servings of Fruits and Vegetables	1,052	71.4	67.7-74.8
Current Smoker	1,125	80.7	77.4-83.6
Former Smoker	1,427	80.1	77.5-82.5
Never Smoked	2,620	75.9	73.8-78.0
Smokeless Tobacco Use	288	68.5	61.1-75.2
No Smokeless Tobacco Use	4,845	78.7	77.2-80.1
Drank Alcohol in Past 30 Days	2,970	74.9	72.9-76.8
No Alcohol in Past 30 Days	2,196	82.8	80.6-84.7
Binge Drinker	785	69.6	65.4-73.5
Not a Binge Drinker	4,368	79.9	78.3-81.3
Heavy Drinker	191	70.6	61.2-78.5
Not a Heavy Drinker	4,959	78.3	76.8-79.7
Hypertension	1,537	87.2	85.0-89.1
No Hypertension	3,636	75.0	73.1-76.7
High Blood Cholesterol	1,378	82.8	80.3-85.0
No High Blood Cholesterol	2,667	79.2	77.2-81.0
No Mammogram within Past Two Years (40+)	493	91.0	87.8-93.4
Mammogram within Past Two Years (40+)	1,687	84.6	82.5-86.5
Insufficient Cervical Cancer Screening	317	88.3	83.0-92.1
Sufficient Cervical Cancer Screening	1,904	77.9	75.5-80.1
No Health Insurance (18-64)	360	77.0	70.8-82.2
Health Insurance (18-64)	3,353	73.9	72.0-75.7
Employer Based Health Insurance Coverage (18-64)	2,355	72.5	70.2-74.7
Private Plan (18-64)	506	76.9	72.1-81.1
Medicaid or Medical Assistance (18-64)	117	84.9	76.0-90.8
The Military, CHAMPUS, TriCare, or the VA (18-64)	129	73.3	63.4-81.4
Indian Health Service (18-64)	142	80.8	71.8-87.4
No Flu Shot (65+)	316	92.0	87.7-94.9
Flu Shot (65+)	1,057	93.5	91.7-94.9
No Pneumonia Shot (65+)	493	91.7	88.6-94.0
Pneumonia Shot (65+)	856	93.8	91.7-95.3
Diabetes	448	88.5	84.4-91.6
No Diabetes	4,729	77.2	75.6-78.7

**Table 15 (continued)**  
**No Vigorous Physical Activity for Selected Health Behaviors and Conditions, 2003**

<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% No Vigorous Physical Activity</b>	<b>95% CI</b>
Current Asthma	365	78.1	71.9-83.2
Former Asthma	139	80.2	71.1-87.0
Never Had Asthma	4,660	77.9	76.3-79.4
Arthritis	1,756	85.4	83.2-87.4
No Arthritis	3,408	75.0	73.1-76.8
Arthritis - Activities Limited	827	87.8	84.5-90.5
No Arthritis - Activities Limited	4,332	76.5	74.8-78.0
Disability - Activities Limited	1,114	88.1	85.6-90.3
No Disability - Activities Limited	4,058	75.7	74.0-77.3
Disability with Special Equipment Needed	367	92.2	86.1-95.8
No Disability with Special Equipment Needed	4,810	77.2	75.6-78.6
Injured in a Fall (45+)	176	84.6	77.1-90.0
Not Injured in a Fall (45+)	3,024	86.6	85.2-88.0
Sunburn in Past 12 Months	1,984	71.2	68.7-73.6
No Sunburn in Past 12 Months	3,175	83.5	81.7-85.1
Military Veteran	849	79.5	76.0-82.5
Not a Military Veteran	4,325	77.7	76.1-79.3

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003